To: Egan, Robert[egan.robert@epa.gov]; Kamke, Sherry[Kamke.Sherry@epa.gov]; Greenwater,

Anthony[greenwater.anthony@epa.gov]; Manville, Jennifer[manville.jennifer@epa.gov]

From: Hanson, Kristen

Sent: Thur 2/23/2017 8:16:09 PM

Subject: FW: Haskell Lake Area Petroleum Contamination Site

Haskell lake DTS proposal.docx

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From: Hanson, Kristen

Sent: Tuesday, January 19, 2016 3:13 PM

To: egan.robert@epa.gov

Subject: FW: Haskell Lake Area Petroleum Contamination Site

Attached is the cost estimate and proposal for the USGS pore water sampling work.

Kristen

From: Andrew Leaf [mailto:aleaf@usgs.gov] Sent: Monday, August 31, 2015 10:10 AM

To: Hanson, Kristen Cc: Michael N Fienen

Subject: Re: Haskell Lake Area Petroleum Contamination Site

Hi Kristen,

Please find the attached proposal for investigating groundwater seepage into Haskell Lake using DTS. We tried to pair down the budget as much as possible- the proposed amount is about the minimum for us to do this type of investigation. With additional funding, much more could be done to address the question of plume impacts to the lake, including a hydrologic budget of the lake, investigation of lake geochemistry and comparison to neighboring lakes, etc.

Note that lab analytical costs for the collected samples are not included. Based on informal quotes from several labs (Synergy Labs in Appleton, and CT Labs in Baraboo, WI), analysis for a full suite including VOCs (including BTEX), semi-volatile organic compounds (including PAHs), major cations and anions (including redox parameters such as nitrate), cadmium and lead should be about \$300 or less per sample. The WI State Lab of Hygiene and USGS National Water Quality Lab are considerably more expensive, especially for the PAHs. Based on these cost differences and USGS reporting and data management requirements, it would probably make the most sense for you to contract with a lab directly for the sample analysis. We can still collect samples, but would focus our reporting and data products on the lakebed seepage investigation.

Feel free to give us a call if you have any questions or would like to discuss anything furtherwe'll be around today and the rest of the week. We look forward to working with you!

Cheers,

Andy



Andrew Leaf Hydrologist U. S. Geological Survey - Wisconsin Water Science Center 8505 Research Way, Middleton, WI 53562 Phone: 608-821-3912, Fax: 608-821-3817 aleaf@usgs.gov

On Aug 24, 2015, at 1:07 PM, Michael N Fienen < mnfienen@usgs.gov > wrote:

Hi Kristen

Nice chatting with you as well. I spoke with Andy and he plans to do some background research on equipment, etc., and will get back with you later this week to discuss next steps.

We are enthusiastic to work with you and LdF on this issue and hope we can support the effort!

Cheers,

Mike

Michael Fienen, Ph. D. Research Hydrologist United States Geological Survey Wisconsin Water Science Center 8505 Research Way Middleton, WI 53562-3581 phone: 608.821.3894

https://profile.usgs.gov/mnfienen http://www.talulat.com/mike

On Aug 24, 2015, at 11:16 AM, Hanson, Kristen < KHanson@ldftribe.com > wrote:

Good Morning Mike,

It was nice chatting with you this morning. Thank you for your thoughts and insight. For reference, attached is background information on the Haskell Lake Area Petroleum Contamination. The Weston Report shows helpful figures, the BIA proposal shows our current FY14 funds, and the diagram shows what we are attempting to chip away at. The potential groundwater – surface water interaction and contaminant transport potential is of interest to us now. I mentioned how there are several science questions needing exploration tucked into this long term assessment remediation project. I appreciate the offer to explore project involvement now and into the future at the Haskell Lake Area Petroleum Contamination Site.

Kristen Hanson

Environmental Specialist

Tribal Natural Resource Department

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